

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

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VERSUS TECHNOLOGY, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 04-1231 (SLR)
	)	
RADIANCE, INC.,	)	
	)	
Defendant.	)	
<hr/>	)	

**VERSUS'S OPENING CLAIM CONSTRUCTION BRIEF**

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Plaintiff Versus Technology, Inc. (“Versus”), submits this brief in support of its proposed claim construction of the terms of United States Patent Nos. 5,027,314 (“the ‘314 patent”); 5,572,195 (“the ‘195 patent”); 6,154,139 (“the ‘139 patent”); and Re. 36,791 (“the ‘791 patent”) (collectively “the Versus Patents”) owned by, or exclusively licensed to, Versus. Versus contends that under the proper claim construction: (1) each of the asserted claims of the Versus Patents is valid; and (2) Defendant Radianse, Inc. (“Radianse”), infringes each of the asserted claims of the Versus Patents.

## **I. LEGAL PRINCIPLES RELATING TO CLAIM CONSTRUCTION**

### **A. Claim Construction Under the Federal Circuit’s Current Law**

The Federal Circuit has recently clarified the proper approach to construing patent claims in the *en banc* decision of *Phillips v. AWH Corp.*, 415 F. 3d 1303 (Fed. Cir. 2005). In *Phillips*, the Federal Circuit identified the intrinsic record as the primary source for determining claim meaning. *Phillips*, 415 F.3d at 1317 (*quoting C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). The intrinsic record includes the claims, specification and prosecution history. *Masco Corp. v. United States*, 303 F.3d 1316, 1324 (Fed. Cir. 2002). Evidence extrinsic to the patent document “can shed useful light on the relevant art,” but is “less significant than the intrinsic record in determining the legally operative meaning of disputed claim language.” *Phillips*, at 1317. (citations and quotations omitted). The *Phillips* decision further explained:

there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence.

*Id.* at 1324 (*citing Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583-84 (Fed. Cir. 1996); *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1367 (Fed. Cir. 2003)).

The claim construction methodology clarified by the Federal Circuit in *Phillips* compels the meanings proposed by Versus. Moreover, certain long standing canons of claim construction (for example, that a court may not read limitations from preferred embodiments into the claims, or process limitations into product claims) are unaffected by the *Phillips* decision. These and other canons, as applicable, are discussed below with reference to particular claim issues.

### **B. Not Every Word in a Claim Requires Construction**

Courts should not define terms that are already in simple terminology. The Federal Circuit has “question[ed] the need to consult a dictionary to determine the meaning of . . . well-known terms.” *C.R. Bard*, 388 F.3d at 863 (Fed. Cir. 2004); *see also STMicroelectronics, Inc. v. Motorola, Inc.*, 327 F. Supp. 2d 687, 698 (E.D. Tex. 2004) (“Although the [disputed] term is perhaps not simple, the individual words in the term have agreed or common meanings that are not in need of further construction.”). Further, “merely rephrasing or paraphrasing the plain language of a claim by substituting synonyms does not represent genuine claim construction.” *C.R. Bard*, at 863.<sup>1</sup>

In this case, many of the terms set forth below do not require any further construction, because they are already as clear as the English language can make them. These terms nevertheless, are included below because Radianse has insisted upon their further legal construction, even though Radianse’s proposed constructions do little more than rephrase or substitute synonyms.

In addition, there are several claim terms listed in the separately filed Joint Claim Construction Statement (D.I. 111) for which no construction is proposed in this brief. Versus

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<sup>1</sup> *See also Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1349 (Fed. Cir. 2001) (court did not err when it declined to construe “melting” when the meaning did not depart from its ordinary meaning or otherwise require construction); *Collegenet, Inc. v. XAP Corp.*, 2004 WL 2429843, \*14 (D. Or. Oct. 29, 2004) (rejecting defendants’ argument that “the district court must construe every term proposed for construction by a party”) (attached hereto as Exhibit A); *Applera Corp.*, 186 F. Supp. 2d at 524, 526 (court declined to construe terms because they were clear on their face and the meaning was “self-evident”).

believes those terms do not require construction because they are clear on their face or the meaning is self-evident from the patent. *Applera Corp. v. MicrosMass UK Ltd.*, 186 F. Supp. 2d 487, 524, 526 (D. Del. 2002). Some of those terms appear only as a non-limiting reference in a claim preamble, and therefore do not require construction. *Intertool Ltd. v. Texar Corp.*, 369 F.3d 1289, 1295 (Fed. Cir. 2004).

## **II. PERSON OF ORDINARY SKILL IN THE ART**

Because patent claims are construed from the vantage point of a person of ordinary skill in the art, it is important to establish the definition of such a person. With regard to the Versus Patents, such a person would have a computer science or electrical engineering degree and/or several years work experience in the wireless electronic arts, in particular, the art of wireless indoor tracking.

## **III. VERSUS'S PROPOSED CONSTRUCTION OF THE TERMS OF THE VERSUS PATENTS**

For the Court's convenience, Exhibit 1 is a revised comparative claim chart setting forth the proposed constructions that Versus and Radianse exchanged on June 17, 2005.

### **A. Claim Terms of the '314 Patent**

#### **1. "light based signal" (claims 1, 9)**

The term "light based signal" does not need construction. If a construction of this term must be made, however, it should not be given Radianse's proposed construction, "a signal transmitted by means of infrared [IR] radiation." Under the doctrine of claim differentiation, Radianse's construction cannot stand.<sup>2</sup> Claim 2 of the '314 patent is "directed to the system of claim 1, wherein said light based signals are infra-red [IR] radiation based signal [sic]." In order for

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<sup>2</sup> *RF Delaware, Inc. v. Pacific Keystone Technologies, Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003) ("Although claim differentiation is not a hard and fast rule of construction, it is applicable where there is a dispute over whether a limitation found in a dependent claim should be read into an independent claim, and that limitation is the only meaningful difference between the two claims.") (*citations and quotations omitted*).



claim 2 to be patentably distinct from the invention of claim 1, the “light based signal” of claim 1 must embrace something other than the IR form of light specifically identified in claim 2.

Additionally, Radianse ignores the word “based” in this claim term. The word “based” only appears in the claims and not the specification of the ‘314. Its usage in the claims appears consistent with the ordinary meaning and usage of the adjective form of the noun “base,” defined as, *inter alia*, “a fundamental ingredient; a chief constituent.” American Heritage College Dictionary 113 (3<sup>rd</sup> Ed. 2000), excerpt attached hereto as Exhibit B. The word “based” indicates that the signal may include other “constituents” in addition to the light component, such as the IR light proposed by Radianse.

## 2. “representative of” (claims 1, 9)

The term “representative of” does not need construction. If a construction of this term must be made, however, it should be “associated with.” In context, the claim is expressly directed to “a light based signal *representative of* an identifying code unique to that transmitter.” Claim 6, which depends from claim 1, illustrates that the term “representative of” is intended to show an associative relationship between the identifying code and the transmitter:

The system of claim 1, wherein said validation circuit comprises a memory for storing said unique identifying codes, and wherein the determination of whether an electrical signal is representative of *a unique identifying code associated with said transmitters* is achieved by comparing said electrical signal to said unique identifying codes stored in said memory.

The ‘314 patent uses the term “representative of” synonymously with the term “associated with.” “Representative of” is used seven times in claim 1 and “associated with” is used six times. The term “representative of” could be used in each of the six instances in which “associated with” is used in claim 1 without changing the meaning of the claim. Likewise, “associated with” could be used in each of the seven instances in which “representative of” is used in claim 1 without changing

the meaning of the claim. Thus, claim 1 appears to use “representative of” as a synonym for “associated with” to avoid excessive repetition of either phrase.

Additionally, the claims and specification of the ‘314 patent demonstrate that associations are fundamental to the operation of the systems and methods disclosed. There must be an association between the subjects to be tracked and the transmitter:

...at least one transmitter is ***associated with*** each of said subjects...

(‘314 patent, col. 11, lines 13-14) (emphasis added). The specification further indicates that the identification means of the transmitters is based on an association within the system:

...an ***identification means*** is provided for communication from one or more transmitters ***associated within*** a system ...

(‘314 patent, col. 2, lines 3-5) (emphasis added).

Radianse wrongly asserts that the term “representative of” must mean “containing.” There is nothing in the ‘314 patent’s claims, specification or prosecution history to support Radianse’s narrow construction of this term. In fact, the intrinsic record suggests Radianse’s proposed construction is not correct. The term “representative of” does not appear to mean “containing” because other uses of the term in the patent are not consistent with this meaning. *Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Intern., Inc.*, 389 F.3d 1370, 1377 (Fed. Cir. 2004). An example of where “representative of” does not appear to mean “containing” can be found at column 6, lines 32-36:

It will be readily understood that the multiple receivers 12 illustrated in FIG. 5 are ***representative of*** the variable number of receivers 12 which may be assembled in the system 10 according to the present invention.

(emphasis added). If the terms “contain” or “containing” were substituted for the term “are representative of” it would appear to change the meaning of this sentence to limit the “variable

number of receivers that may be assembled in the system” to the three receiver assemblies illustrated in FIG. 5. Such an interpretation stands contrary to reason.

Versus believes any construction of the term “representative of” should not be done in isolation, but rather in context as proposed above. Thus, the term “representative of” should be construed, if necessary, to recognize the associative relationship between the signal and the identifying code unique to that transmitter.

### **3. “transmission means” does not invoke 35 U.S.C. § 112 ¶ 6**

Versus also challenges Radianse’s assertion that the “transmission means” language of claim 1 is governed by 35 U.S.C. § 112 ¶ 6. The entire limitation reads:

transmission means for transmitting a light based signal representative of  
an identifying code unique to that transmitter

(‘314 patent, col.11, lines 15-17).

It is well established that the mere recitation of a mechanism “in functional terms is not sufficient to convert a claim element containing that term into a 'means for performing a specified function' within the meaning of section 112(6).” *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (“detent mechanism” defined in functional terms was not intended to invoke 35 U.S.C. § 112 ¶ 6).<sup>3</sup> In addition, 35 U.S.C. § 112 ¶ 6 “does not apply when the claim limitation itself recites sufficient acts for performing the specified function.” *Seal-Flex, Inc. v. Athletic Track and Court Construction*, 172 F.3d 836, 849 (Fed. Cir. 1999). *See also, Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996) (“perforation means for tearing” held not to invoke 35 U.S.C. § 112 ¶ 6 because the claim already

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<sup>3</sup> *See also Al-Site Corp. v. VSI International Inc.*, 174 F.3d 1308, 1318 (Fed. Cir. 1999) (while the claim elements “eyeglass hanger member” and “eyeglass contacting member” include a function, these claim elements were not held to invoke 35 U.S.C. § 112 ¶ 6 because the claims themselves contain sufficient structural limitations for performing those functions).

describes the structure supporting the tearing function (*i.e.*, the perforation)).<sup>4</sup> Here the claim already describes the structure supporting the transmitting function, the “transmitter.” People of ordinary skill in the art understand that wireless transmitters contain modulators for modulating some or all of the transmission to encode the signal so that the transmitter signal may be distinguished from background noise or other devices. Declaration of Henry Tenarvitz (“Tenarvitz Decl.”), ¶ 4, attached hereto as Exhibit C. No more detailed structure than the recited transmitter is necessary to accomplish the recited function, *i.e.*, the transmission of “a light based signal representative of an identifying code unique to that transmitter.” In fact, claim 9, a nearly identical method claim to that of claim 1, identifies a “transmitter” structure in the same manner as appears in claim 1. Neither Radianse nor the patent examiner challenge the sufficiency of the transmitter disclosure in claim 9.

Even if this limitation were to be construed under 35 U.S.C. § 112 ¶ 6, Versus disagrees with Radianse’s proposed structural limitation. Under 35 U.S.C. § 112 ¶ 6, proper construction requires the Court to “identify the claimed function and then to determine the structure in the specification that corresponds to that function.” *Frank’s Casing*, 389 F.3d at 1376 (Fed. Cir. 2004); *Gemstar-TV Guide Intern., Inc. v. Int’l Trade Com’n*, 383 F.3d 1352, 1361 (Fed. Cir. 2004) (“The written description must be examined to determine the structure that corresponds to and performs that function.”).

Radianse proposes that the structure that corresponds to and performs the “transmitting a light based signal” function in claim 1 is the transmitter structure disclosed in Figure 2, identified as no. 11 in the written description and the figures of the ‘314 patent. This particular structure is identified as “the typical transmitter assembly 11 of the transmitter stage,” in the “Detailed Description of the Preferred Embodiment” section of the ‘314 patent. Radianse improperly points to superfluous structural features

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<sup>4</sup> See also *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360 (Fed. Cir. 2000) (holding “second baffle means” does not invoke 35 U.S.C. § 112 ¶ 6 because the word “baffle” itself imparts structure and the claim further recites the structure of the baffle).

that do not actually perform the function of “transmitting a light based signal representative of an identifying code unique to that transmitter.” *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1334 (Fed. Cir. 2004); *see also Wenger Mfg., Inc. v. Coating Machinery Systems, Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001). (“Under § 112, 6, a court may not import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function”).<sup>5</sup>

The only structures from the specification identified by Radianse that are necessary to “transmit a light based signal representative of an identifying code unique to a transmitter,” are a timer, programmable memory (PROM) and an IR emitter. Tenarvitz Decl., ¶ 5.

#### 4. “receivers” (claims 1, 9)

The term “receivers,” as used in the claims of the ‘314 patent, means receiver assemblies that include both sensor and processor components. While the term “receiver” is sometimes used to refer only to the sensor component of the receiver assembly, its usage in claim 1 makes the above definition apparent:

*each of said receivers comprising a converter for converting a transmitted light based signal to an electrical signal and a validation circuit for processing.*

(‘314 patent, col. 11, lines 19-22) (emphasis added). According to this description, the term “receiver” is intended to include the sensor (inherent), the converter, and a microprocessor for validating the signal.

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<sup>5</sup> *See also Vulcan Engineering Co., Inc. v. Fata Aluminium, Inc.*, 278 F.3d 1366, 1376 (Fed. Cir. 2002) (“the claims are construed in light of the specification, and are not limited to a designated “preferred embodiment” unless that embodiment is in fact the entire invention presented by the patentee...[w]hen the claims include means-plus-function terms in accordance with § 112 ¶ 6, claim scope necessarily is not limited to the preferred embodiments, but includes equivalents thereof.”).

### 5. meaning of “processor means” (claim 1)

When properly construed, the limitation “processor means” refers generally to a processor or set of processors, including microprocessors and/or CPU. Processors are well recognized structures to those skilled in the relevant art. Processors are components in computers, or other electronic devices, that have been preprogrammed to perform commands and transmit/receive data. Tenarvitz Decl., ¶ 6. Versus believes the term “processor” is well recognized and need not be given another construction. *See Biotec Biologische*, 249 F.3d at 1349; *see also Data General Corp. v. International Business Machines Corp.*, 93 F. Supp.2d 89, 97 (D. Mass. 2000) (with respect to “processor means”, “to one of ordinary skill in the art, “processor” refers to a central processing unit which provides memory commands and provides and receives data items.”) If any construction is required, however, when properly construed, the limitation “processor means” in claim 1 of the ‘314 patent does not invoke 35 U.S.C. § 112 ¶ 6, as explained below, but rather is:

a processor or collection of processors that is programmed to record, scan and accumulate data regarding received signals.

The basis for this construction is claim 1 itself, where the “processor means” is said to be used for “recording...electrical signals [and] receivers,” and further “comprises scanning means for scanning said receivers and accumulating means for accumulating...areas [and] a badge count...” Col. 11, lines 28-41. The specification indicates that these tasks are accomplished, at least, by the CPU:

[A]ll of the data from the individual transmitters is *stored* together in an array in a main *central processing unit*. The *accumulated data* in the main *CPU* is available for further processing such as identification of the location of the individual transmitters, statistical analysis and print-outs.

(‘314 patent, col. 2, lines 37-39) (emphasis added). This provision explains that the “storing” (or “recording”) of the data array and the accumulation of data occurs in a CPU. In addition, “scanning” is said to occur within a CPU, where the CPU scans the data array stored in the CPU. Col. 10, lines 57-59 (“For the purpose of this specific example, in this operation *the host CPU is assumed to scan the array*

every 10 seconds.”). “Processor means” should therefore be construed to mean a CPU and any other processor within a locating system that is programmed to record, scan and accumulate data regarding received signals.

**6. “processor means” in claim 1 does not invoke 35 U.S.C. § 112 ¶ 6**

Radianse wrongly proposes “processor means” is a means-plus-function limitation governed by 35 U.S.C. § 112 ¶ 6. As noted above, the use of functional terminology with “means for” language is not sufficient to bring a claim into the realm of 35 U.S.C. § 112 ¶ 6, particularly where specific structures or acts for performing the function are specified in the claim. *Greenberg*, 91 F.3d at 1583; *Seal-Flex*, 172 F.3d at 849. Here, the “processor means for recording...and determining” is akin to the “perforation means for tearing” recited in *Cole*, 102 F.3d at 531. In *Cole*, the Federal Circuit determined that the structure supporting the tearing function was already recited in the claim by reference to the “perforation.” Here the structure corresponding to the “recording...signals...and determining in which...areas transmitters are located” function is already recited in the claim by reference to the “processor.” People of skill in this art recognize “processors” to be structures such as a microprocessor and/or central processor programmed to perform functions, such as recording data (*e.g.*, received signals) or processing data (*e.g.*, determining location). Tenarvitz Decl., ¶ 8. In addition, as noted above, the District of Massachusetts construed the same term (“processor means”) and determined that the term “processor” recites sufficient structure to remove it from the ambit of 35 U.S.C. § 112 ¶ 6. *Data General*, 93 F. Supp. 2d at 97 (D. Mass. 2000) (“Because Claim 10 refers to a structure, *i.e.*, a “processor” which a person of ordinary skill in the art would consider to be a structure that performs the same functions as the “means”, § 112(6) does not apply to the construction of that term.”).

The “scanning means” and “accumulating means” are recited as subparts of the “processor means.” These terms therefore correspond to the processor structure identified in the claim as explained above. People of ordinary skill in the electronic and computer arts recognize that processors can be

programmed to record, scan and accumulate data. Tenarvitz Decl., ¶ 9. The processor structure recited in claim 1 is therefore sufficient to remove these limitations from the application of 35 U.S.C. § 112 ¶ 6.

Even if this limitation were to be construed under 35 U.S.C. § 112 ¶ 6, Versus disagrees with Radianse's proposed structural limitation. Radianse proposes that the structure that corresponds to and performs the "processor means" function in claim 1 is "a data processor separate from the system's central computer." Radianse's construction is inconsistent and wrong for the reasons stated above (*i.e.*, the functions of the claimed "processor means" include functions disclosed to occur in the CPU).

#### **7. "step of" in claim 9 does not invoke 35 U.S.C. § 112 ¶ 6**

Radianse asserts that claim 9 is written in step-plus-function language in which the claimed tracking method is accomplished by the steps of converting, recording, determining and accumulating. For the same reasons explained above, Radianse is wrong to assert that claim 9 invokes 35 U.S.C. § 112 ¶ 6. Like the structure disclosed in the means clauses of claim 1, sufficient acts are disclosed for the steps recited in claim 9. *O.I. Corp. v. Tekmar Co., Inc.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997) ("[S]ection 112, ¶ 6, is implicated only when means plus function without definite structure are present, and that is similarly true with respect to steps, that the paragraph is implicated only when steps plus function without acts are present.").

First, the use of the term "step of" rather than "step for" indicates that claim 9 is not a "step-plus-function" claim. *Seal-Flex*, 172 F.3d at 849-50 (Rader, J. concurring) ("the phrase "step for" in a method claim raises a presumption that § 112, ¶ 6 applies. This presumption gives legal effect to the commonly understood meanings of "of" - introducing specific materials, structure or acts - and "for" - introducing a function... the term "step" alone and the phrase "steps of" tend to show that § 112, ¶ 6 does not govern that limitation"); *see also CIVIX-DDI, LLC v. Microsoft Corp.*, 84 F. Supp. 2d 1132, 1149 (D. Colo. 2000).



Second, there are no specified functions corresponding to the steps identified by Radianse in claim 9. What Radianse characterizes as “functions” are the acts to be performed in stepwise fashion. Radianse mistakenly construes these “ing” verbs simultaneously as steps and functions. *O.I. Corp.*, 115 F.3d at 1583 (“If we were to construe every process claim containing steps described by an “ing” verb, such as passing, heating, reacting, transferring, etc. into a step-plus-function limitation, we would be limiting process claims in a manner never intended by Congress.”). Radianse’s misconstruction further stems from its improper reliance on the preamble recitation of “steps of” followed by a series of steps. *O.I. Corp.*, 115 F.3d at 1583 (“[A] statement in a preamble of a result that necessarily follows from performing a series of steps does not convert each of those steps into step-plus-function clauses.”).

Finally, even if a limitation in claim 1 could be construed as “step-plus-function,” a parallel step limitation in claim 9, is not presumptively a “step plus function” limitation. *Serrano v. Telular Corp.*, 111 F.3d 1578, 1583 (Fed. Cir. 1997); *O.I. Corp.*, 115 F.3d at 1583 (“we would not agree with [the accused infringer] that the “parallelism” of the claims means that the method claims should be subject to the requirements of section 112, ¶ 6.”).

## **B. Claim Terms of the ‘195 Patent**

### **1. “transmitted identifying codes” (claim 1)**

The term “transmitted identifying codes” does not need construction. If a construction is required, however, the term means “an identifying code transmission that is media independent.”

The term “transmitted identifying codes” is used twice in the same clause of the claim, once to refer to the code in the signal coming from the transmitter and a second time to refer to code in the signal coming from the sensor. It is well known to people of ordinary skill in the art that signals sent from sensors are electrical signals. *Tenarvitz Decl.*, ¶ 10. The prior art ‘314 patent specifically

explains this step as follows: “The sensor on receiving the radiation converts it to electrical signals....” (‘314 patent, col. 2, lines 19-20).

In contrast, Radianse asserts that “transmitted identifying codes” are identifying codes transmitted by means of infrared signals. Radianse’s construction imposes an unnecessary limitation on a claim term that is otherwise clear on its face. In addition, Radianse’s construction is inconsistent with above referenced principle that sensors transmit data by way of electrical signals.

Not only is Radianse’s construction contrary to the specification and prosecution history, it is contrary to Radianse’s assertions regarding the application of the ‘195 patent to fields of use outside “IR Only.” On April 22, 2005, Radianse executed a non-exclusive license for the ‘195 and ‘791 patents with the patentee (“Freschloc License”) (R021685-87) (D.I. 79, Exhibit 3) -- even though Versus already possessed a 10-year exclusive license to the same patents since January 31, 1997 (“PTFM License”) (D.I. 79, Exhibit 2, VER002726-36). The Freschloc License purports to grant to Radianse a present non-exclusive right “to all fields of use of the Licensed Patents other than the IR Only Field.” (D.I. 79, Exhibit 3, R021686). The Freschloc License states:

All other fields of use of the Licensed Patents other than the IR Only Field shall be included in the license granted herein as of the effective date of this Agreement.

(“Freschloc License”) (R021685-87) (D.I. 79, Exhibit 3). The only form of electromagnetic energy expressly identified in the ‘195 patent is IR, yet Radianse recognizes the patent to embrace the use of additional or alternative forms of electromagnetic energy as well.

Radianse asserts the same theory in support of its motion to dismiss currently before the Court. In its opening brief, Radianse argues that “IR Only” signals are not the only means by which the systems and methods of the ‘195 can operate. (D.I. 79, p. 9). Under a section caption asserting, “Versus Possesses Exclusive Rights Under the ‘195 and ‘791 Patents Only Within the Infrared Field of Use,” Radianse describes a generic application under either licensed patent:

Taking as an example the application of *identifying an object in an indoor positioning system*, the identification of the object is by means of a “tag” or transmitting device placed on the object to be located. The transmitter could accomplish this result by ***transmitting an identification code using either RF or IR***....Taking the analysis to a further level, an “application” could also be performed by use of ***both IR and RF transmissions***.

(D.I. 79, p.13-16) (emphasis added). As a matter of estoppel, Radianse should be precluded from arguing that “transmitted identifying codes are identifying codes transmitted by means of infrared signals,” when Radianse has previously argued to this Court that an application under the ‘195 can work by “transmitting an identification code using either RF or IR.”

## **2. “unique identifying codes from infrared transmitters” (claim 13)**

The term “unique identifying codes from infrared transmitters” does not need construction. However, if a construction is required, for the same reasons as discussed above in subsection 1, the term should be construed to mean “a unique identifying code transmission that is media independent.”

## **3. “variable based protocol” (claims 1, 13)**

The term “variable based protocol” is not defined in, and is not discernable from, the specification or prosecution history of this patent. In addition, the term is not used by, and has no particular meaning to, people of ordinary skill in the art:

The phrase “variable-based protocol” has no particular technical meaning; I have never encountered this term outside of the ‘195 patent, and a literature search turned up no hits except for the ‘195 patent. I assume for the purpose of this discussion that the phrase describes any protocol which conveys variables, including protocols that convey the values of object identifier variables.

Expert Report of Walter S. Leipold, p. 11, excerpt attached hereto as Exhibit D.

Given that “variable based protocol” is not a term of art, and that its meaning is not apparent from the intrinsic record, the term should be given the plain and ordinary meaning of the individual words, *i.e.*, a protocol which conveys variables.

#### 4. “object identifier variables” (claims 1, 13, 16)

When properly construed, the limitation “object identifier variables” for claims 1 and 13 is expressly defined at column 2, lines 1-7 of the specification:

The computer communicates with the interface circuitry using object identifier variables. The object identifier variables *identify* both the *unique identification* of the various *sensors*, touch ports, and external controllers, as well as the unique identities of infrared *transmitters* that come within the proximity of an infrared sensor, as well as touch memories that are placed within the touch ports.

(‘195 patent, col. 2, lines 1-7) (emphasis added). Thus, “object identifier variables” are the particular variables that identify the unique identification of the sensors and infrared transmitters. Radianse’s attempt to read further into the claim is unnecessary and unjustified.

#### 5. “Means for” of Claim 1 does not invoke 35 U.S.C. § 112 ¶ 6

Versus challenges Radianse’s assertion that the “means for” clause in claim 1 of the ‘195 patent is governed by 35 U.S.C. § 112 ¶ 6. The entire limitation reads:

*a computer connected to said network*, said computer including *means for* sending and receiving messages over said computer network in a variable-based protocol that implements object identifier variables;

(‘195 patent, col. 31, lines 60-63) (emphasis added). This is not a “means plus function” limitation because the limitation recites sufficient structure for performing the specified function, *i.e.*, “a computer connected to said network.” See *Seal-Flex*, 172 F.3d at 849; *Cole*, 102 F.3d at 531; *Envirco Corp.*, 209 F.3d 1360. No more detailed structure than the recited “computer connected to said network” is necessary to accomplish the recited function, *i.e.*, the “sending and receiving messages over said computer network in a variable-based protocol that implements object identifier variables.”

Even if this limitation were to be construed under 35 U.S.C. § 112 ¶ 6, Versus disagrees with Radianse's proposed structural limitation. Radianse proposes that the structure that corresponds to the means/function in claim 1 includes "a computer network including infrared transmitters, infrared sensors, external device controllers, concentrators, and control processors or personal computers as set forth in Figs 1-5." Some of these structures, however, are superfluous and unnecessary to perform the claimed function. *See Wenger*, 239 F.3d at 1233; *Golight*, 355 F.3d at 1334. The corresponding structures, the only structures necessary to perform the claimed function, are the computer network and control processor. Tenarvitz Decl., ¶ 11.

### **C. Claim Terms of the '791 Patent**

#### **1. "area-detection" (claims 39, 48, 66)**

The term "area-detection" does not require construction. In addition, the term appears in a claim preamble that does not impart meaning to the claim and therefore construction is unnecessary. *Intertool*, 369 F.3d at 1295. If construction is required, the term "area-detection" means "using receivers that receive radiolocation transmissions from assigned areas," as expressly stated in the Technical Field of the Invention section of the specification. ('791 patent, col. 1, lines 17-19).

#### **2. "assigned areas" (claims 39, 48, 66)**

The term "assigned areas" does not require construction. In addition, the term appears in a claim preamble that does not impart meaning to the claim and therefore construction is unnecessary. *Intertool*, 369 F.3d at 1295. If construction is required, the term "assigned areas" means "each receiver of the array is assigned a specific location-area, such that it receives TAG transmissions almost exclusively from TAGs located in that area" as expressly stated in the Summary of the Invention section of the specification. ('791 patent, col. 2, lines 31-32). As

explained in more detail below, this does not require, as Radianse proposes, that a signals can only be received by a single receiver.

### 3. “assigned area of a predetermined size” (claims 39, 48, 66)

When properly construed, the limitation “assigned area of a predetermined size” found in claims 39, 48 and 66 of the ‘791 patent is an “area that is predetermined based upon the detection range of the receiver.”

The term “assigned area” is used in the specification to refer to a “low resolution embodiment.” (‘791 patent, col. 1, line 67 - col. 2, line 1). The specification further explains this embodiment as follows:

For a low resolution embodiment, each receiver of the array is assigned a specific location-area, such that it receives TAG transmissions almost exclusively from TAGs located in that area.

(‘791 patent, col. 2, lines 31-34).

The term “assigned areas of predetermined size” was therefore intended, under the low resolution embodiment, to “assign areas” based on the detection range, *i.e.*, the physical capabilities, of the receivers to detect signals from within that area.

In contrast, Radianse asserts that “assigned areas of predetermined size” means “an area surrounding a receiver that is configured in advance so that the signal from the object within that area is received only by one receiver.” Radianse’s construction has two critical flaws. First, nothing in the patent or prosecution history suggests that two or more receivers cannot be assigned to the same area to enhance detection ability within that area. While the low resolution embodiment might be best served by avoiding overlapping receipt of one signal by multiple receivers assigned to separate areas, overlapping receipt may be intended and preferred to enhance coverage for receivers assigned to the same area. The specification explains, for an alternative low resolution embodiment, that:

In this case, selecting receiver location is flexible, subject to providing coverage for an assigned object-location area.

(‘791 patent, col. 11, lines 37-39).

Second, Radianse’s excessively narrow construction stands in contrast to the ‘791 patent’s written description of the “low resolution embodiment.” In one of the examples of this embodiment, where receivers *may* be purposefully spaced in a ‘one receiver per area’ grid, it is explained that:

the receivers *could* be distributed in a grid, with the size of the object-location area being determined by the predetermined spacing between receivers. In this case, object location resolution is a function of receiver spacing, with TAG transmitter power being cooperatively selected so that a TAG transmission is received by the most proximate receiver (*in this configuration, receipt of a TAG transmission by more than one receiver represents a loss of object location resolution*)...

\* \* \*

...for the configuration in which object location is based on receiver spacing, TAG transmission power will be relatively low *to limit* range, and therefore, *the likelihood* that a TAG transmission will be received by more than one receiver.

(‘791 patent, col. 11, lines 40-63) (emphasis added). The highlighted portion indicates that, even in this specific example, a TAG transmission received by more than one receiver is possible, although not preferred. Radianse attempts to read the most preferred outcome for one specified example of the low resolution embodiment as a limitation for all of the asserted claims.

#### **D. Claim Terms of the ‘139 Patent**

##### **1. “including” (claims 1, 5)**

When properly construed, the limitation “including” found in claims 1 and 5 of the ‘139 patent means “associated with.”

In context, claims 1 and 5 express the term as follows:

a TAG capable of transmitting a substantially line-of-sight signal *including* a unique TAG ID substantially simultaneously with a substantially non-line-of-sight signal also *including* the unique TAG ID

(‘139 patent, col. 7, lines 46-50; col. 8, lines 13-17) (emphasis added).

In the Background Art section of the ‘139 patent, a fundamental aspect of the invention borrowed from the prior art, disclosed in the ‘314 patent, is explained:

Each receiver validates the signal to determine whether the signals are representative of the unique identifying codes *associated with* the transmitters.

(‘139 patent, col. 2, lines 23-25) (emphasis added). It can be understood from this passage that a primary aspect of the unique identifying code in tracking systems is to allow the system to associate the code with a transmitter and to allow a receiver to validate a signal from that transmitter based on the code. It is this *association* between the unique identifying code and the transmitter that makes the transmitted signal relevant.

As with the ‘314 patent, associations are fundamental to the operation of the systems and methods disclosed in the ‘139 patent. These associations are described in various terms in the specification. First, there must be an association between the subjects to be tracked and their tags:

*compare:*

the method includes the step of determining the location of each TAG and its *associated* subject

(‘139 patent, col. 5, lines 13-15) (emphasis added).

*with:*

the system *includes* a TAG for each subject to be located...

(‘139 patent, col. 3, lines 62-63) (emphasis added). Second, there must be an association between tag transmissions and IDs:

...signal *including* a unique TAG ID...

(‘139 patent, col. 4, lines 66-67) (emphasis added). Third, there must be an association between IDs and the area detection packets:



... area detection packet is generated *including* the unique TAG ID...

(‘139 patent, col. 5, lines 7-8) (emphasis added). Fourth, there must be an association between the receiver that generated the area detection packet and a physical area/location where the subject is to be located:

Finally, the method includes the step of determining the *location* of each TAG and its associated subject *based on* the identity of the extended area and limited area *receivers* for the TAG as *represented by* its extended area and limited area detection packets

(‘139 patent, col. 5, lines 12-16) (emphasis added).

In contrast, Radianse asserts that “including” means “containing.” Radianse’s proposed construction infers an unnecessary and narrow physical limitation that is not called for by the specification. First, there is no suggestion in the claims or specification that the single unique ID code must be *physically attached* to either transmission media (line-of-sight and/or non-line-of-sight). *Toro Co. v. White Consol. Industries, Inc.*, 199 F.3d 1295, 1303 (Fed. Cir. 1999) (Rader, J., dissenting) (“the ordinary meaning of “include” does not require physical attachment.”). Finally, the parts of the system that make use of the unique ID code do not even consider the media type that Radianse argues the ID must be “contained in.” The specification explains this point as follows:

The process is reversed at the microprocessor/sensory side. That is, a single microprocessor is used with multiple sensors (i.e. receivers) that *remove the subcarrier* from the signal leaving the data as demodulated serial data. The receiver microprocessor then demodulates the ID received. It then passes on the data upstream such that *the only relevant information that the signal came from RF or IR is determined by the software* when the sensor is programmed into the system. This is referred to at setup or installation. It is only at this time that the system is knowledgeable as to the type of sensor it is (as well as its location).

In this way, a single microprocessor is modulating different signals simultaneously or staggered. Different sensors sensitive to different media and subcarriers and a single microprocessor *demodulate data virtually independent of the media.*

(‘139 patent, col. 42-57) (emphasis added). Notably, the media that physically contains the ID is not relevant to the microprocessor that demodulates the transmitter ID. This description indicates that the system requires nothing more than an *association* between a received signal and a unique ID in order to further process the received signal.

## 2. “substantially simultaneously” (claims 1, 5)

When properly construed, the limitation “substantially simultaneously” found in claims 1 and 5 of the ‘139 patent is “within the normal transmission interval of the other signal.”

The term “substantially simultaneously” can only be understood in the context of its addition during prosecution of the application for the ‘139 patent. The term was added during prosecution to overcome an anticipation rejection by the examiner. (Excerpts from prosecution history of the ‘139 patent are included as Exhibit E hereto). The amendment was explained as follows:

...In particular, applicant’s attorney has amended claim 1 and 5 to make it clear that each TAG is capable of transmitting a substantially line-of-sight signal, including a unique TAG ID substantially simultaneously with a substantially non-line-of-sight signal including the unique TAG ID. This feature is neither taught, disclosed or discussed by any of the prior art references, including U.S. Patent to Borrás, et al. taken either alone or in combination with another.

For example, the U.S. Patent to Borrás, et al. as noted on page 2 of the specification, discloses a communication system and apparatus wherein the system utilizes one of two types of communication methods depending on the location of the user. ***When the user is in an on-sight area the user communicates via infrared techniques. When the user is in an off-sight area the user communicates using a different communication media, including an RF communication media.***

Clearly, this is contrary to the teachings of the present invention as now claimed. As noted on page 9, lines 24-25 of the specification, a single microprocessor of a TAG modulates different signals simultaneously or staggered. In other words, the TAG is capable of transmitting a substantially line-of-sight signal, including a unique TAG ID substantially simultaneously with a substantially non-line-of-sight signal also including a unique TAG ID.

(Ex. E, VER009201) (emphasis added). The phrase “the TAG is capable of transmitting a substantially line-of-sight signal...substantially simultaneously with a substantially non-line-of sight signal” is explained to mean the same thing as what the specification describes as “a TAG [that] modulates different signals simultaneously or staggered.” (‘139 patent, col. 4, lines 53-54). It is apparent from this argument that the term “substantially simultaneously” was added to show that the system periodically transmits both signal types (“communications media”) while operating within the same tracking area. The term was not added to show a particular or precise timing association between the two transmitted signal types. In practical terms, in order for the system to utilize both signals types within the same area, one signal type should be capable of being transmitted within the normal transmission interval of the other signal type.

In contrast, Radianse attempts to construe the term “simultaneously” without consideration for the modifier “substantially” and without addressing the context in which the term was added during the prosecution of the ‘139 patent application.

### 3. “receiver” (claims 1, 5)

The term “receiver” is explicitly defined as a sensor in the Summary of the Invention section, according to the following description:

The process is reversed at the microprocessor/sensory side. That is, *a single microprocessor is used with multiple sensors (i.e. receivers)* that remove the subcarrier from the signal leaving the data as demodulated serial data.

(‘139 patent, col. 4, lines 42-45) (emphasis added). Based on this description, the term “receivers” means multiple sensor components in the system, which are separate and distinct from the microprocessor.

#### IV. CONCLUSION

Versus respectfully requests that the Court construe asserted claims of the Versus Patents consistently with the definitions proffered by Versus.

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Dated: November 4, 2005

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**UNITED STATES DISTRICT COURT  
DISTRICT OF DELAWARE**

**CERTIFICATE OF SERVICE**

I hereby certify that on November 4, 2005, I electronically filed the foregoing **VERSUS'S OPENING CLAIM CONSTRUCTION BRIEF** with the Clerk of the Court using CM/ECF, and served copies of the same, on this date, on the following individuals in the manner indicated:

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